

(No Model.)

J. A. KLINE.
STOVE SHELF.

No. 532,791.

Patented Jan. 22, 1895.

Fig. 1.

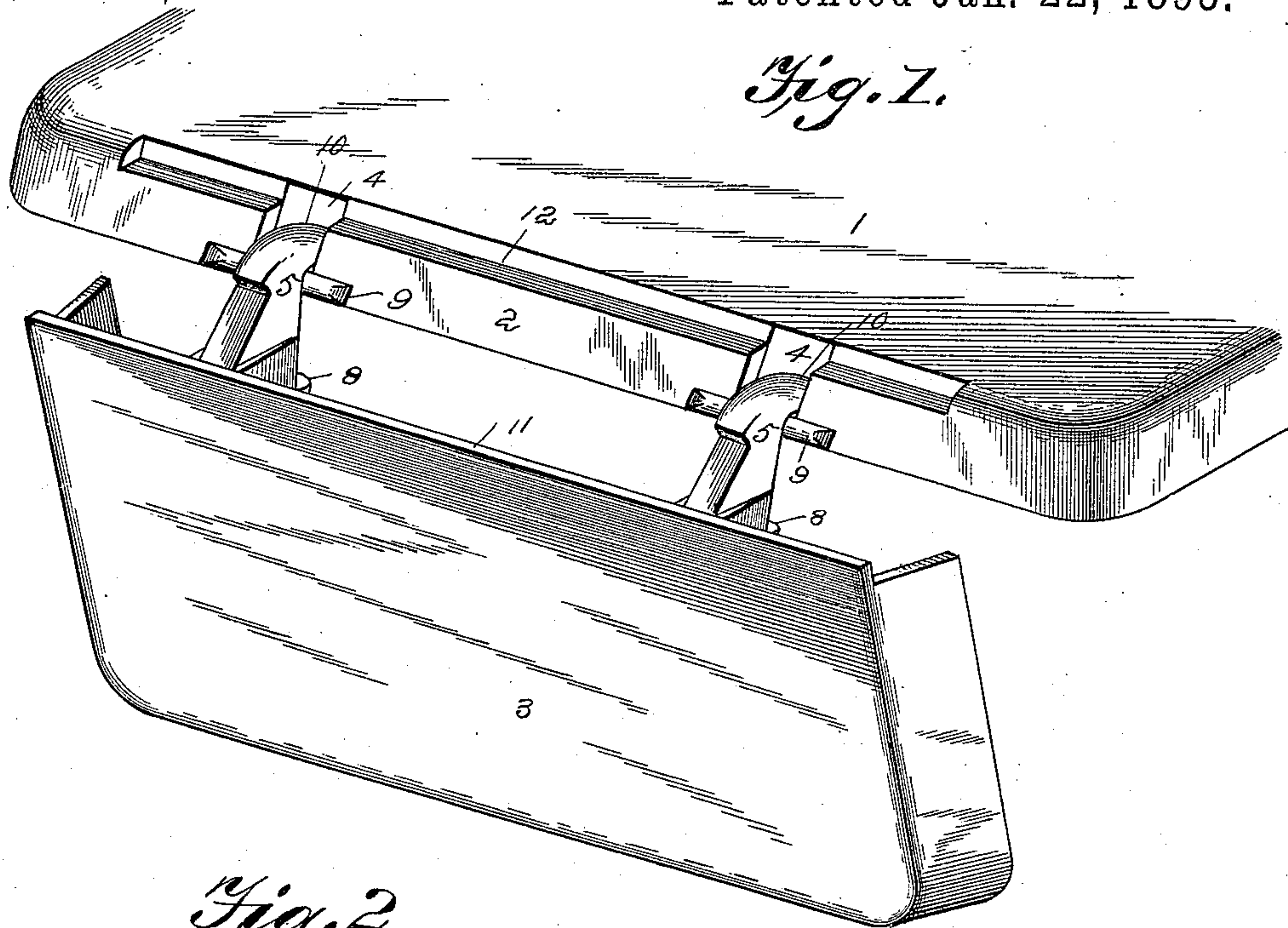


Fig. 2.

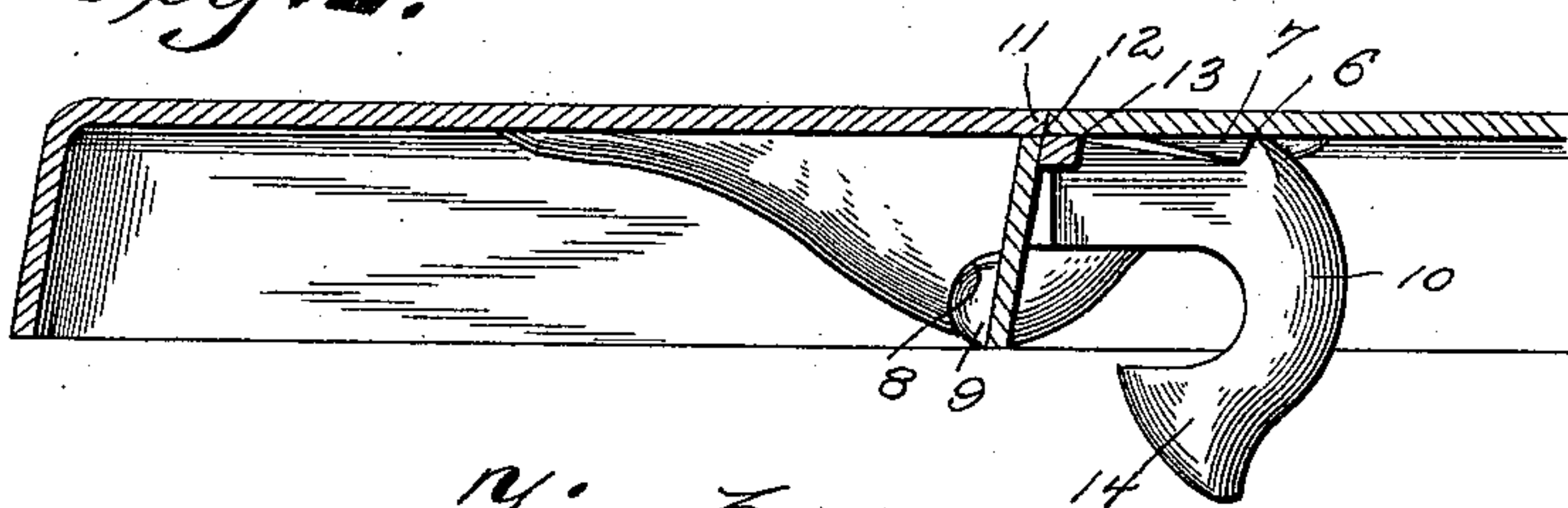


Fig. 3.

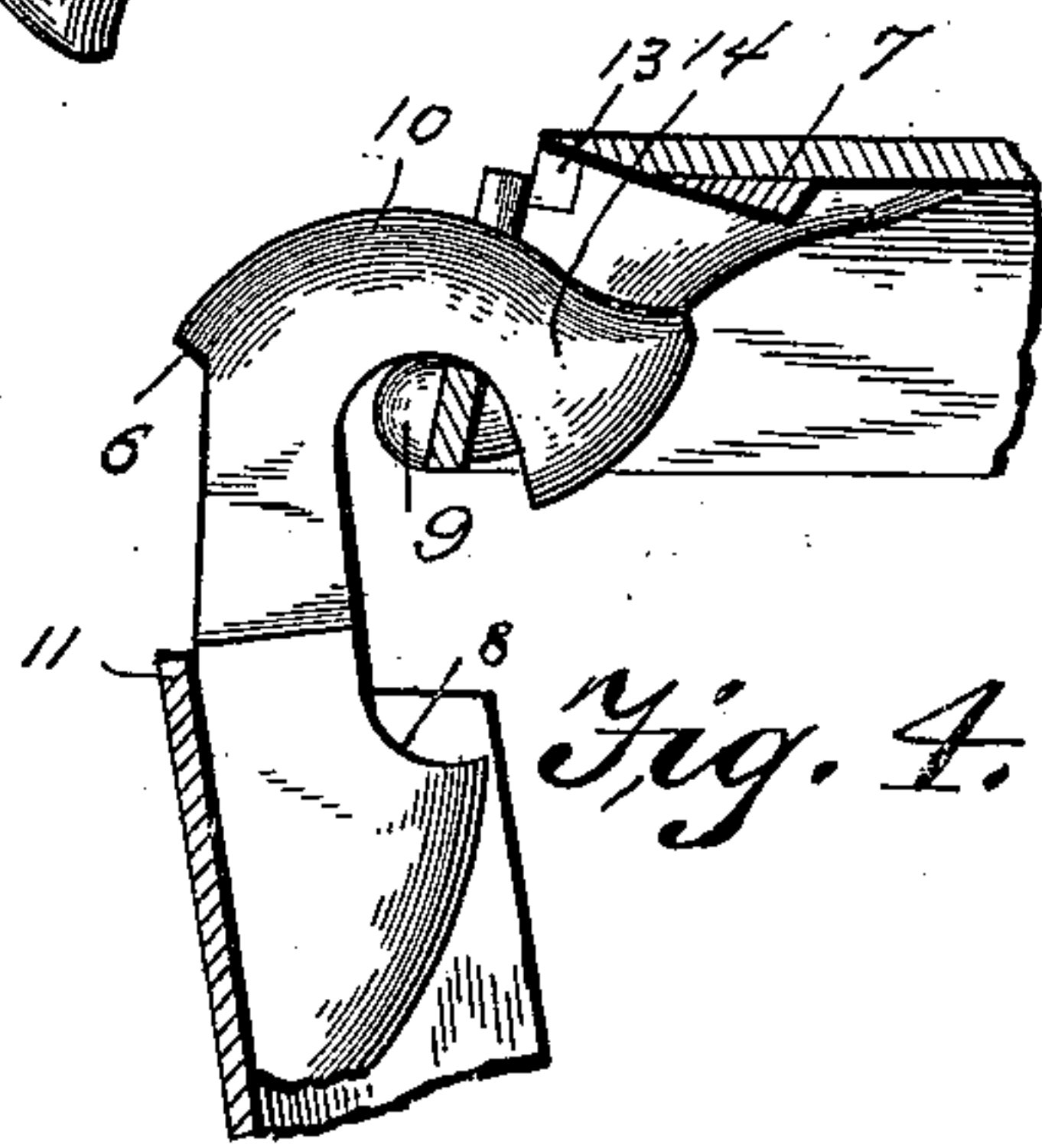
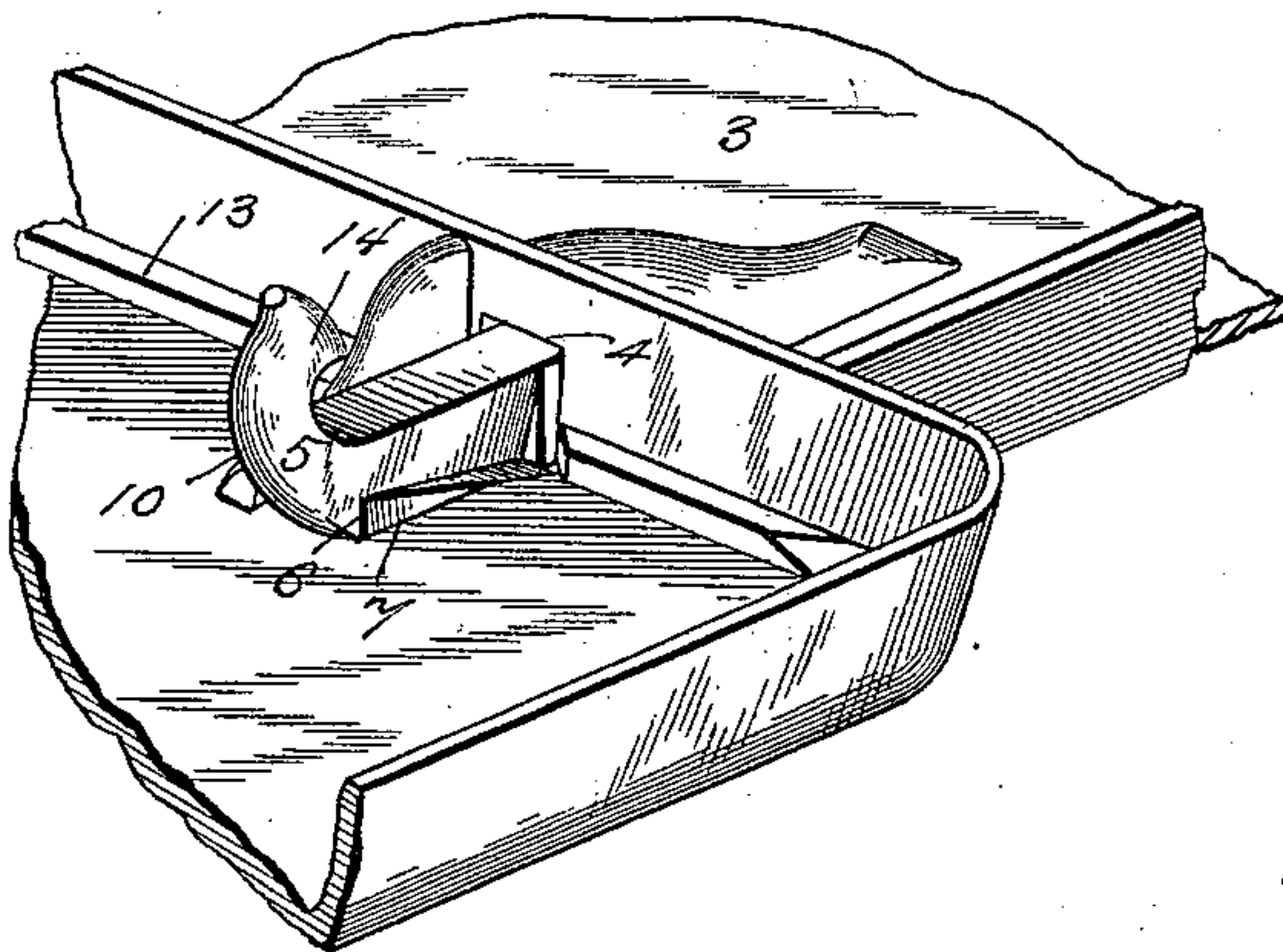


Fig. 4.

Inventor
John A. Kline.

Witnesses

E. H. Moulton
W. D. Kline

By *his* Attorneys.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JOHN A. KLINE, OF READING, PENNSYLVANIA, ASSIGNOR TO THE READING STOVE WORKS, ORR, PAINTER & CO.

STOVE-SHELF.

SPECIFICATION forming part of Letters Patent No. 532,791, dated January 22, 1895.

Application filed November 30, 1894. Serial No. 530,435. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. KLINE, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented a new and useful Stove-Shelf, of which the following is a specification.

My invention relates to a shelf for stoves, tables, sewing machines and similar articles, and the object in view is to provide a simple, strong, and efficient connection between the shelf and the supporting article, whereby the shelf may be firmly secured in its operative position and may be readily adjusted to hang vertically from such article.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of the shelf in its pendent or vertical position. Fig. 2 is a vertical section showing the shelf in its horizontal or operative position. Fig. 3 is a perspective view of the shelf and adjacent portion of the article to which the shelf is connected, inverted, the parts of the hinge being shown in their operative or locked position. Fig. 4 is a vertical section partly broken away showing the shelf in its pendent or lowered position, said section being taken through the opening in which the hooked member of the hinge extends.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a plate which, in the construction illustrated, forms a part of the top of a stove or range and is provided with a depending flange 2, and 3 represents the shelf which carries one member of the hinge by which it is connected to the plate 1. The depending-flange 2 is provided with an opening 4 for the reception of the free hook-shaped end of the member 5 of the hinge, said member 5 being secured to the shelf and projecting beyond the inner edge thereof. The projecting portion 5 is provided at its upper side with a beveled shoulder 6 to engage a beveled stop 7 on the under side of the plate 1,

and said member is further provided at its under side with a concave-shoulder 8 to engage a rounded projection 9 on the flange 2 below the opening 4. The member 5 terminates in a hook 10 which is adapted when the shoulder on the upper side thereof is disengaged from the beveled-stop, to engage the lower edge of the opening 4, and thus support the shelf in a pendent position as shown in Fig. 1.

In order to more effectively support the inner edge of the shelf and form a tight joint with the plate, the shelf is provided at its inner edge with an overhanging-lip 11 which fits in an angular seat 12 formed at the junction of the flange 2 with the plate.

The effect of the beveled-shoulder at the inner end of the hook-shaped member of the hinge engaging with a beveled-stop on the plate is to draw the shelf inward or toward the plate when the shelf is weighted; the engagement of the over-hanging lip with the seat at the edge of the plate forming a fulcrum. Furthermore, the engagement of the concave lower shoulder on the hinge-member with the rounded projection at the lower side of the opening 4 braces the shelf and prevents the depression of the outer edge thereof. In order to prevent bending or distorting the portion of the flange against which the lower concave shoulder bears, I employ angle braces 13 arranged in the angle between the under surface of the plate and the inner surface of the depending-flange 2. These braces are disposed close to the opening 4 and at the inner sides thereof. The hinge-member is further provided at the extremity of its hook-shaped portion with an enlargement 14 which prevents accidental detachment of the shelf for the reason that it is equal in length to the opening 4, and the shelf must be held in an exactly vertical position in order to accomplish the detachment thereof.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having described my invention, I claim—

1. A hinge for drop shelves having a hook-shaped part or member adapted to be secured

to the shelf, provided on its free end at its upper side with a beveled-shoulder to engage a stationary beveled stop and at an intermediate point on its lower side with a concave shoulder to engage a rounded projection arranged in a plane below that of the stationary-stop, substantially as specified.

2. The combination with a plate having a depending flange provided with an opening, of a beveled-stop arranged on the plate and spaced from said opening, a rounded projection on the said flange at the lower side of the opening, a shelf provided at its inner edge with an overhanging-lip to engage a seat at the adjacent edge of the plate, and a hinge-member secured to the shelf, and extending through the opening of the flange, said mem-

ber being provided on its upper side with a beveled-shoulder to engage said stop and on its lower side with a concave-shoulder to engage the rounded projection at the lower side of the opening, and said member terminating in a hook to engage the flange at the lower side of the opening and having an enlargement which is approximately equal in length to the opening, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN A. KLINE.

Witnesses:

CHARLES S. PRIZER,
W. H. SHICK.